

ABSTRACT OF THE DISCLOSURE

A method of resin transfer molding uses an open base mold filled with fiberglass material and a soft tool sealed over the base mold. A vacuum is applied to a vacuum chamber that surrounds the mold and communicates with the fiberglass material through vacuum conduits. Resin is injected into the closed mold and is drawn through the fiberglass material to the edge of the mold with the assistance of the vacuum. The soft tool is preferably a flexible sheet having an edge seal to connect to the base mold and a vacuum channel with a vacuum port that surrounds the mold. The injection head releasably connects to the soft tool and preferably uses a solenoid actuated injector to supply resin to the mold. The injection head can include a self sealing device to seal the injection port and a self cleaning mechanism for flushing resin from the interior chamber of the head.